Program Description/Textbook or Print Instructional Material

| Vendor: Pearson Education, Inc., publishing as Pearson Prentice Hall Web Address: www.phschool.com |
|--|
| Title: C++ How to Program |
| Author: Harvey Deitel and Paul J. Deitel Copyright: 2003 |
| ISBN: 0-13-038474-7 Course/Content Area: Information Technology: Programming |
| Intended Grade or Level: 9-12 Readability Level: 6.4 Modified Dale-Chall |
| List Price: \$ 79.96 Lowest Wholesale Price: \$ 59.97 |
| Level of Accommodations (Level One, Two, or Three) Three |
| If Level Two or Three, please provide rationale for not meeting Level One Compliance. Pearson Prentice Hall |
| is unable to provide files in Levels One or Two due to the variety of page layout systems used to create the text. |
| These systems are not compatible with specialized formats such as XML or HTML. |

FEATURES

DISCLAIMER: The features of each book or program were developed by the publisher and do not reflect the opinion of the State Review Team, State Textbook Commission, nor of the Kentucky Department of Education.

Content

This comprehensive text is geared for students with little or no programming experience. It teaches programming by presenting the concepts in the context of full working programs. The text emphasizes program clarity through structured and object-oriented programming, software reuse, and component-oriented software construction. An optional case study is introduced in Ch. 2 and built upon in the next nine chapters. The materials introduce UML and key notational schemes students will encounter in the real world. An earlier treatment of strings and arrays as objects enables students to being working with objects and familiarize themselves with object-oriented concepts. The text provides the latest draft of the ANSI C++ standards. A CD-ROM includes a C++ compiler, source code for all the book's examples and hyperlinks to the C++ demos and Internet resources. An extensive set of exercises and projects encourage students to apply what they have learned in each chapter.

Student Experiences

This comprehensive text provides students with a complete learning system for C++ and enhances learning with exercises, color to interpret the codes they examine, links to other resources on the Websites, and self-review exercises with answers for immediate feedback of their progress.

Assessment

Assessment is built into this stimulating program and each chapter provides self-review exercises with answers for continued building onto the skills students are learning. An Instructor's Resource CD, Lab Manual, Student Solutions Manual, and Companion Website provide additional assessment activities.

Organization

Each of the 19 chapters begins with objectives, an outline, and an introduction and ends with a Summary, Terminology, Self-Review Exercises, Self-Review Answers, and Exercises. This complete program is written for students without a lot of programming experience and takes them from the basics to more

advanced concepts. The CD and Internet Web sites provide the student and teacher with a complete learning system.

Resource Materials

• Gratis Items To Be Provided And Under What Conditions

<u>Free upon request, 1 per teacher user with a minimum purchase of 20 C++ How to Program Student Editions:</u>

Student Solutions Manual

• Available Ancillary Materials

RESEARCH DATA/EVIDENCE OF EFFECTIVENESS

DISCLAIMER: The research data and evidence of effectiveness was provided by the publisher and does not reflect the opinion of the State Review Team, State Textbook Commission, nor of the Kentucky Department of Education.

This 4th Edition reflects the suggested improvements of a distinguished team of industry professionals and academics who have reviewed the materials for accuracy and methodology. The text adheres to the latest draft of the ANSI C++ standards.



Group V - Career/Technical Vocational/Practical Living Education Instructional Materials Evaluation Tool IT Programming



| Title: C++ How To Prog. | ram | | | Cost: \$ 59.97 | |
|---|---------------------------|------|------------------------------------|-------------------------------|--|
| Publisher: Pearson Educ | ation/Prentice-Hall | | | | |
| Item Evaluated: Textbook | k | | | | |
| Copyright Date: 2003 | | | Evaluator: Scott Horan/David Davis | | |
| Content Level: 9-12 | | | Date of Evaluation: 7/29/2003 | | |
| Level of Alternative Format | Level 1 – Full Compliance | Leve | l 2 – Provisional Compliance | Level 3 – Marginal Compliance | |
| This section completed by Exceptional Children Services | | | | | |

Overall Strengths and/or Weaknesses

Disclaimer: Comments on the strengths and/or weaknesses of each book, material or program were written by members of the State Textbook/Instructional Materials Review Team and reflect their opinions. They do not reflect the opinions of the State Textbook Commission nor the Kentucky Department of Education. In addition, the State Textbook/ Instructional Materials Review Team completed each evaluation form during the week of July 28-Aug. 1, 2003. In order to maintain the integrity of the of the review team's comments, editing was limited to spelling and punctuation.

| Recommendations: |
|---|
| X Recommended by reviewers to State Textbook Commission |
| ☐ Not recommended by reviewers to State Textbook Commission |

Publisher's Explanation of Reviewer's Comments: By action of the State Textbook Commission, publishers are provided limited space, 150 words, to respond to what they may consider factual errors made by the reviewers in the evaluation.



Group V - Career/Technical Vocational/Practical Living Education Instructional Materials Evaluation Tool IT Programming



| Title: C++ How To Program | | Publisher: Pearson Education/Prentice-Hall |
|---|--------------------|--|
| Technology Management Summary Data: | 20 possible points | 11 points earned |
| Technology Management Comments: | | |
| | | |
| Technology Presentation/Interface Summary Data: | 40 possible points | 18 points earned |
| Technology Presentation/Interface Comments: | | |
| Content Summary Data: | 36 possible points | points earned |
| Content Comments: | | |
| | | |
| Instruction & Management Summary Data | 52 possible points | <u>38</u> points earned |
| Instruction & Management Comments: | | |
| | | |
| Organization & Structure Summary Data | 36 possible points | points earned |
| Organization & Structure Comments: | | |
| Resource Material Summary Data | 40 possible points | 14points earned |
| Resource Material Comments: | | |
| | | |



Group V - Career / Technical & Vocational/Practical Living Electronic Instructional Media Review Form - C++ How To Program-Pearson/PH Stand Alone/Independent or Integrated Software for IT Programming



| Equipment (circle or change fill color) |
|---|
| Windows |
| Macintosh |
| CD-ROM |
| DVD |
| Sound |
| Other |
| If other, explain |

| Grade Level (circle or change fill color) |
|---|
| Primary |
| Intermediate |
| Middle |
| High |
| |

| Audience (circle or change fill color) |
|--|
| Individual |
| Small Group |
| Large Group |

| Format (circle or change fill color) |
|---|
| Stand Alone/Independent |
| Integrated |
| Supplemental |
| In lieu of basal test |

| Cost: Included with text | | | |
|--------------------------|----------------|--|--|
| single copy | site license | | |
| network version | school version | | |
| lab pack of copies | online | | |

| Type of Software: Check all that apply | Simulation | Management | Interdisciplinary | Problem Solving | Tutorial |
|---|------------|--------------------|-------------------|-----------------|--------------------|
| Exploratory | Creativity | Drill and Practice | Critical Thinking | Utility | C++ Code— Other |

| Rating Scale: | 3—Some of the time | 1—None of the time |
|-------------------|--------------------|--------------------|
| 4—All or the time | 2—Minimally | 0— Not applicable |

| Management | Rating |
|--|-------------|
| Allows customizing for individual learning needs. | 1 |
| Allows students to exit and resume at a later time. | 4 |
| Keeps a students performance record, where needed. | 1 |
| Allows control of various aspects of the software (e.g., turning sound off). | 1 |
| Allows for printed reports. | 4 |
| Comments: | Total 11 |

| | Other | |
|--|-------|-------------|
| Presentation/Interface | | Rating |
| Presents material in an organized manner. | | 4 |
| Has consistent, easy-to-use, on-screen instructions. | | 2 |
| Has developmentally correct presentation format. | | 1 |
| Adapts to different learning environments (learning styles/multiple intelligences, etc.) | | 2 |
| Accessible for special needs students. | | 0 |
| Runs smoothly, without long delays. | | 3 |
| Presents easy-to-view text and graphics. | | 2 |
| Presents easy-to-hear and understand sounds. | | 0 |
| Avoids unnecessary screens, sounds, and graphics. | | 4 |
| Provides immediate, appropriate feedback. | | 0 |
| Comments: | | Total 18 |

| Content—IT Programming | Rating |
|--|-------------|
| Career Focus/Employability Skills/Workplace Readiness Skills | 1 |
| Customer Needs Analysis | 0 |
| Analysis of Programming Requirements | 0 |
| Develop Programming Structure | 4 |
| Design and Develop the Program | 4 |
| Implement Program Code | 4 |
| Test Program | 4 |
| Validate Program | 4 |
| Major Types of Programs: Visual Basic, Java, C++, etc. | 4 |
| Comments: | Total 25 |

| Rating Scale: | 2—Minimally |
|--------------------|--------------------|
| 4—All or the time | 1—None of the time |
| 3—Some of the time | 0— Not applicable |

| Instruction and Assessment | Rating |
|--|-------------|
| Identifies a Sense of Purpose | 4 |
| Builds on Student Ideals | 4 |
| Engages Students | 3 |
| Develops Computer Maintenance Ideas | 0 |
| Promotes Student Thinking | 4 |
| Assesses Student Progress | 3 |
| Enhances The Learning Environment | 2 |
| Reading level is appropriate for interest and ability level of intended student group; level remains consistent throughout. | 2 |
| Commonwealth Accountability Testing System (CATS) "like" Assessment is provided | 4 |
| Variety of Assessments (diagnostic, formative, summative, open response, multiple choice, individual, small group, oral, demonstrations, presentations, self and peer performance, portfolio prompts) is included. | 4 |
| Includes activities and opportunities for integration of technology. | 4 |
| Reflects researched-based practices (e.g. hands-on activities, technology, problem-solving situations) | 4 |
| Differentiation techniques and activities suggested. | 0 |
| Comments: | Total 38 |

| Rating Scale: | 3 – Some potential for learning | 1 - Not present |
|---------------------------------|-----------------------------------|--------------------|
| 4 – High potential for learning | 2 – Little potential for learning | 0 – Not applicable |

| Organization and Structure | Rating |
|--|-------------|
| Organization is logical and allows for spiraling of content. | 4 |
| Vocabulary and key terms are clearly defined and easily accessible within each lesson. | 3 |
| Visual illustrations (e.g. graphs, charts, models) and examples are clearly presented and content-related. | 2 |
| Illustrations and language reflect diversity (e.g. racial, ethnic, cultural, age, gender, disabilities). | 0 |
| Legible type, length of lines, spacing, and page layout and width of margins contribute to overall appearance and use. | 2 |
| Student materials seem durable and conducive to daily use. | 4 |
| Includes sufficient glossary, index and appendices. | 4 |
| Employs accurate grammar and spelling | 4 |
| Organization of material can be effectively used with Standards Based Units, Core Content and Program of Studies. | 4 |
| Comments: | Total 27 |
| Resource Materials | Rating |
| Teacher materials coordinate easily with student materials (e.g. additional resources included at point of need, student pages shown, integration of technology indicated) | 3 |
| Activities are included that adapt to the various learning styles, intelligences, and interest/ability levels. | 3 |
| Extension activities including adaptations and accommodations for students with special needs. | 0 |
| Resources provide objectives, background information, common student errors, hints, advice for lesson implementation and real-world connections, connections with career and/technology and references (e.g. solution manuals, study guides) | 2 |
| Suggestions are made for integration of themes and /or interdisciplinary instruction. | 1 |
| Integration opportunities suggested and examples given. | 1 |
| Teacher resources are available online. | 1 |
| Online resources available – Repeat of information in text. | 1 |
| Online resources available – Practice skills only. | 1 |
| Online resources available – New application materials. | 1 |
| Comments: | Total 14 |

| Rating Scale: | 2—Minimally |
|--------------------|--------------------|
| 4—All or the time | 1—None of the time |
| 3—Some of the time | 0— Not applicable |